Appl. No. 09/944,337 Amdt. Dated October 20, 2003 Reply to Office Action of July 18, 2003

**Amendments to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

A transmission for a wind generator, the Claim 1 (presently amended):

transmission comprising

a housing,

a rotor supported by said housing and rotatably mounted in said housing, said

rotor carrying a rotor head, said rotor being supported in said housing by an outer bearing toward

said rotor head and an inner bearing away from said rotor head, said rotor having a larger

diameter at said outer bearing than at said inner bearing,

a multi-stage planetary transmission stage driven by said rotor, said stage

comprising gears which are rotatably mounted in said housing, an annular gear fixed to said

rotor, at least one planetary gear on a respective at least one shaft which is supported by said

housing and rotatably mounted at a fixed position in said housing, said at least one planetary gear

meshing with said annular gear, a further planetary gear on each said shaft, and a sun gear

mounted on a sun gear shaft, said further planetary gear meshing with said sun gear, and

a spur gear stage driven by said multi-stage planetary transmission stage sun gear

via said sun gear shaft, said spur gear stage being arranged to drive at least one generator.

Claim 2 (original): A transmission as in claim 1 further comprising

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an annular gear carrier fixed directly to said rotor,

an annular gear fixed to said annular gear carrier, said multi-stage planetary transmission stage including said annular gear.

Claim 3 (original): A transmission as in claim 1 further comprising
a pair of sliding contact bearings supporting said rotor in said housing, at least one

of said bearings absorbing axial forces,

an oil pump for raising said bearings hydrostatically, and

means for controlling said oil pump so that said bearings can be switched between partially and fully hydrodynamic lubrication.

Claim 4 (original): A transmission as in claim 2 wherein said rotor and said annular gear carrier are formed integrally.

Claim 5 (original): A transmission as in claim 2 wherein said annular gear carrier is fitted to said rotor in at least one of a form fit and a press fit.

Claim 6 (original): A transmission as in claim 2 wherein said annular gear is fixed to said annular gear carrier by a toothed coupling.

Claim 7 (original): A transmission as in claim 1 wherein said rotor is formed integrally with a rotor head which holds the blades driven by the wind.

Claim 8 (previously amended): A transmission as in claim 1 further comprising a bearing housing secured to said housing, and bearings for said spur gear stage supported in said bearing housing.

Claim 9 (original): A transmission as in claim 1 wherein said planetary transmission stage comprises gears having helical teeth.

Claim 10 (original): A transmission as in claim 1 wherein said planetary transmission stage drives said spur gear stage via a sun gear carried on a sun gear shaft, said sun gear shaft being mounted for resilient axial movement.

Claim 11 (original): A transmission as in claim 10 further comprising a sensor which records the axial force of the sun gear shaft.

Claim 12 (original): A transmission as in claim 2 wherein said annular gear has internal teeth which are surface-hardened.

Claim 13 (previously amended): A transmission as in claim 1 further comprising a flanged housing surrounding said spur gear stage, and

at least one output shaft arranged in said flanged housing for driving a respective generator, each said output shaft having a pinion gear which engages said spur gear stage.

Claim 14 (previously presented): A transmission as in claim 1 wherein said multistage planetary transmission stage comprises at least one planetary gear on a shaft which is supported by said housing and rotatably mounted at a fixed position in said housing.

Claim 15. (previously amended): A transmission as in claim 1 wherein said rotor carries a rotor head, said rotor having a conical shape with a diameter which increases toward said rotor head.

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Claim 16 (previously amended): A transmission as in claim 1 wherein said multistage planetary transmission stage comprises at least one planetary gear on a respective at least one shaft which is supported by said housing and rotatably mounted at a fixed position in said housing, said planetary gear being located adjacent to said rotor between said outer bearing and said inner bearing.

Claim 17 (previously presented): A transmission as in claim 16 further comprising a further planetary gear on each said shaft, and

a sun gear on a sun gear shaft, said further planetary gear meshing with said sun gear to drive said spur gear stage via said sun gear shaft.

Claim 18 (previously presented): A transmission as in claim 17 wherein said rotor and said sun gear shaft are hollow and are coaxially mounted.

Claim 19 (previously presented): A transmission for a wind generator, the transmission comprising:

a housing;

a rotor supported by said housing and rotatably mounted in said housing;

a multi-stage planetary transmission stage driven by said rotor, said stage comprising an annular gear fixed to said rotor, at least one planetary gear on a respective at least one shaft which is supported by said housing and rotatably mounted at a fixed position in said housing, said at least one planetary gear meshing with said annular gear, a further planetary gear on each said shaft, and a sun gear mounted on a sun gear shaft, said further planetary gear meshing with said sun gear; and

a spur gear stage driven by said sun gear via said sun gear shaft, said spur gear stage being arranged to drive at least one generator.

Claim 20 (new): A transmission as in claim 19 herein said spur gear stage comprises a spur gear which is fixed against rotation on said sun gear shaft, said transmission further comprising at least one pinion engaging said spur gear, each said at least one pinion being fixed to an output shaft for driving a generator.